



MORELS (*Morchella* spp.)

Description: Sponge, pinecone and honeycomb mushroom-the nicknames of the morel-are all appropriate. Morels are easy to recognize and delicious to eat, making them the most popular wild mushroom in Montana.

The surface of a morel is covered with definite pits and ridges, and the bottom edge of the cap is attached directly to the stem. Size: 2" to 12" tall.

There are three common species of morels:

1. The common morel (*Morchella esculenta*): When young, this species has white ridges and dark brown pits and is known as the "white morel." As it ages, both the ridges and the pits turn yellowish brown, and it becomes a "yellow morel." If conditions are right the "yellow morel" can grow into a "giant morel," which may be up to a foot tall.
2. The black morel or smoky morel (*Morchella elata*): The ridges are gray or tan when young, but darken with age until nearly black. The pits are brown and elongated. These morels are best when picked young; discard any that are shrunk or have completely black heads.
3. The half-free morel (*Morchella semilibera*): This is the exception to the rule that morels have the bottom of the cap attached directly to the stem. The cap of the half-free morel is attached at about the middle (see illustration). These morels have small caps and long bulbous stems.

When and Where: From spring to early summer. Morels are found on the ground in a variety of habitats, including moist woodlands, river bottoms and areas burned in previous years.

Cautions: Morels are quite distinctive, but there is a small chance they could be confused with false morels. See page 10 for ways to distinguish true morels from false morels.

Half-free morels may be confused with a mushroom called the wrinkled thimble cap (*Verpa bohemica*). Fortunately, this mushroom is also edible in moderation. The cap of the wrinkled thimble cap is free from the stem except at the top (see illustration).

Cooking Hints: Cut morels in half to check for insects. Wash carefully. Morels can be breaded and fried, stewed, baked, creamed or stuffed with dressing. Their delicate flavor is brought out best by sauteing them in butter for about five minutes on each side.

Morchella esculenta



Verpa bohemica



Morchella semilibera



Common Morel



Helvella sp.



Gyromitra caroliniana

FALSE MORELS

(*Helvella* and *Gyromitra* spp.)

False morels are difficult to treat in an article on edible and poisonous mushrooms, because they so clearly fit both categories.

On one hand, many people have enjoyed eating false morels for years and may even consider them a favorite wild mushroom. On the other, false morels have definitely caused serious illnesses and deaths in the United States.

The problem seems to involve the amount of a toxic chemical, called monomethyl hydrazine (MMH), present in these mushrooms. MMH causes diarrhea, vomiting and severe headaches, and occasionally it can be fatal. However, because of different cooking techniques and different individual sensitivities to MMH, false morels poison some people but leave others unaffected. In addition, false morels in some areas of the country contain more MMH than in other areas. All this makes these mushrooms a very doubtful group as far as edibility is concerned.

False morels have wrinkled, irregular caps that are brainlike or saddle-shaped. They may be black, gray, white, brown or reddish. (The "big red morel," *Gyromitra caroliniana*, is a large false morel with a reddish cap.) Other names include elephant ears, Arkansas morels and brain mushrooms. Size 2" to 8" tall. Under different weather conditions, and in different localities, different species of toxic cousins may appear. This year's false morels may look different than last year's.

The methods of differentiating morels from false morels are highlighted below.

False morels differ from true morels in two obvious ways:

- 1. The cap surface has lobes, folds, flaps or wrinkles, but it does not have pits and ridges like a true morel. You might say their caps bulge outward instead of being pitted inward.**
- 2. The bottom edge of the cap of a false morel hangs free around the stem, like a skirt. On true morels, the bottom edge of the cap is attached to the stem (see page 4).**

False morels are found in spring, summer and fall, on the ground in woodlands. The photo below is a specimen which is readily distinguishable from true morels, but others are more difficult to distinguish. Rely on competent identifiers before eating any wild mushroom.

Note: Because false morels have caused severe illness, liver damage and deaths, we recommend that you avoid eating them, cooked or otherwise. If you nevertheless choose to do so, they should be thoroughly cooked in a well-ventilated room, since MMH is driven off by heat. It is important to understand that MMH is not the only toxin or allergen involved in their toxicity.



A false morel (*Gyromitra sp.*)
Not Edible - Poisonous